

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to the telephone interview on date: 03/25/2010.
Claims 1-17 and 20 are still pending.
Claims 18 and 19 have been cancelled
Claim 20 is newly added.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Harry F. Smith (Reg. No. 32,493) on 03/25/2009.

The amendment follows:

1. **(Currently Amended)** A method for reallocating transport format combination identifiers (~~TFCI~~) of transport format combinations (~~TFC~~) upon removal of at least one transport format combination to be performed in a wireless system utilizing a flexible layer one to transfer data over the air interface thereof, where a number of transport formats (~~TF~~) indicating configurations of transport channels carrying data flows are included in a transport format combination, the transport format combination belonging to a transport format combination set (~~TFCS~~) indicating transport format combinations valid on a certain basic physical subchannel, the method comprises ~~characterized in that it has the steps of~~

[[I]] obtaining information about removal of at least one transport format combination from the transport format combination set in order to determine a first transport format combination identifier become vacant due to the removal of the associated transport format combination,

[[I]] assigning by a device said first vacant transport format combination identifier to a next unremoved transport format combination, if any, having a transport format combination identifier subsequent to the removed transport format combination, and likewise assigning the following transport format combination identifiers to further unremoved transport format combinations, if any, thus a number of last transport format combination identifiers previously in use become vacant, and

[[I]] reducing the length of the transport format combination identifiers by an amount dependent on the additional length required to be used to indicate a certain transport format combination identifier if the number of last transport format combination identifiers become vacant still included.

5. **(Currently Amended)** The method of claim 1, wherein said wireless system utilizes a GERAN (GSM/EDGE Radio Access Network) as a radio access network.

6. **(Currently Amended)** A method for reallocating a transport format combination identifier (TFCI) of a transport format combination (TFC) upon removal of at least one transport format combination to be performed in a wireless system utilizing a flexible layer one to transfer data over the air interface thereof, where a number of transport formats (TF) indicating configurations of transport channels carrying data flows are included in the transport format combination, the transport format combination belonging to a transport format combination set (TFCS) indicating transport format combinations valid on a certain basic physical subchannel, the method comprises **characterized** in that it has the steps of

[[I]] obtaining information about removal of a transport format combination from the transport format combination set in order to determine a transport format combination

identifier become vacant due to the removal of the associated transport format combination,

[[-]] assigning by a device the vacant transport format combination identifier to an unremoved transport format combination having a subsequent transport format combination identifier, and

[[-]] reducing the length of the transport format combination identifiers if enabled by the assigning step.

10. (Currently Amended) A device operable in a wireless system utilizing a flexible layer one to transfer data over the air interface thereof, where a number of transport formats (~~TF~~) are adapted to indicate configurations of transport channels carrying data flows included in a transport format combination (~~TFC~~), and the transport format combination is adapted to belong to a transport format combination set (~~TFCs~~) indicating transport format combinations valid on a certain basic physical subchannel, the set including one transport format combination with a transport format combination identifier, said device comprising processing means and memory means configured to process and store instructions and data, and data transfer means configured to transfer data, ~~characterized in that it~~ the device is arranged to

obtain information about removal of at least one transport format combination from the transport format combination set in order to determine a transport format combination identifier become vacant due to the removal of the associated transport format combination,

assign the vacant transport format combination identifier to an unremoved transport format combination having a subsequent transport format combination identifier, and

reduce the length of the transport format combination identifiers if enabled by the assign procedure.

15. **(Currently Amended)** The device of claim 10 that is ~~substantially~~ a base station, a base station controller, a combination of a base station and a base station controller, or a mobile terminal.

16. **(Currently Amended)** The device of claim 10 that is operable in a GERAN (~~GSM/EDGE Radio Access Network~~) radio access network.

17. **(Currently Amended)** ~~The A~~ non-transitory medium tangibly encoded with a computer executable program configured adapted to execute, when the computer executable program is run by a processor, a method the steps of claim 4 for reallocating transport format combination identifiers of transport format combinations upon removal of at least one transport format combination to be performed in a wireless system utilizing a flexible layer one to transfer data over the air interface thereof, where a number of transport formats indicating configurations of transport channels carrying data flows are included in a transport format combination, the transport format combination belonging to a transport format combination set indicating transport format combinations valid on a certain basic physical subchannel, the method comprises
obtaining information about removal of at least one transport format combination from the transport format combination set in order to determine a first transport format combination identifier become vacant due to the removal of the associated transport format combination,
assigning said first vacant transport format combination identifier to a next unremoved transport format combination, if any, having a transport format combination identifier subsequent to the removed transport format combination, and likewise assigning the following transport format combination identifiers to further unremoved transport format combinations, if any, thus a number of last transport format combination identifiers previously in use become vacant, and
reducing the length of the transport format combination identifiers by an amount dependent on the additional length required to be used to indicate a certain transport

format combination identifier if the number of last transport format combination identifiers become vacant still included.

18-19. (Canceled).

20. (New) A non-transitory medium tangibly encoded with a computer executable program configured to execute, when the computer executable program is run by a processor, a method for reallocating a transport format combination identifier of a transport format combination upon removal of at least one transport format combination to be performed in a wireless system utilizing a flexible layer one to transfer data over the air interface thereof, where a number of transport formats indicating configurations of transport channels carrying data flows are included in the transport format combination, the transport format combination belonging to a transport format combination set indicating transport format combinations valid on a certain basic physical subchannel, the method comprises

obtaining information about removal of a transport format combination from the transport format combination set in order to determine a transport format combination identifier become vacant due to the removal of the associated transport format combination,

assigning the vacant transport format combination identifier to an unremoved transport format combination having a subsequent transport format combination identifier, and

reducing the length of the transport format combination identifiers if enabled by the assigning step.

Reasons for Allowance

3. Claims 1-17 and 20 are allowed.

The following is a statement of reason for the indication of allowance:

Applicant has amended independent claims 1 and 6 to make the step clearly machine implemented (see examiner's amendment).

Applicant's specification specifies that "a carrier medium like a floppy, a CD or a memory card" (see page 18, lines 24-25) as a physical memory device; therefore claims 17 and 20 recite "A non-transitory medium" that is statutory.

The updated search found:

a) Speight discloses that "When a dedicated channel (DCH) is allocated to a user, it is clearly not possible to reallocate physical resources that have been allocated to this user but are not used because of the selected TFC" (see specification for more details).

b) Timus claims that "The method according to claim 39, wherein said temporarily resource allocating step comprises the step of temporarily reducing allowed bit-rate below a guaranteed minimum bit-rate by restricting allowed Transport Format Combinations (TFC) and said reallocating step comprises the step of increasing said allowed bit-rate to at least said guaranteed minimum bit-rate by releasing said imposed TFC restrictions" (see specification for more details).

c) Shiu discloses that "In some system designs, the TTI for a particular transport channel may be dynamically adjusted to provide improved performance. The TTI used for each transport channel is provided as part of a transport format combination indicator (TFCI), which is transmitted on a dedicated physical channel assigned to the user terminal" (see specification for more details).

However, the combination or each of the cited references above does not disclose nor fairly suggest each and every claimed limitation of independent claims, therefore claims 1-17 and 20 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy Q Phan whose telephone number is 571-272-7924. The examiner can normally be reached on 9AM-7:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Huy Q Phan/
Primary Examiner, Art Unit 2617
Date: 03/26/2010